

TEST YOURSELF

Algebra 2
Unit #1
WS #6

Identify the subset(s) of the set of real numbers to which each belongs:

1. $\sqrt{3}$

2. $-\frac{1}{2}$

3. 6

4. -8

Show that each decimal can be written as a quotient of two integers.

5. 0.175

6. $0.\overline{8}$

7. $0.\overline{39}$

Simplify.

8. $-3 + 12 \div 4 - 8 \times 2 + 5 \times 3$

9. $|6 - 3| + 2|2 - 8| - |-10|$

10. $\frac{3(3 + 5) - 2(1 - 5)}{2 + 6 \div 3}$

11. $\frac{1}{2}\left(5 - \frac{27}{3}\right) + 30 \div 6$

Evaluate.

12. $x^2 - 3xy + y^2$; $x = 2$ and $y = 3$

13. $\frac{ab - 2a}{b + a}$; $a = 3$ and $b = -2$

Identify the property of real numbers illustrated by each of the following.

14. $\frac{2}{7} \cdot \frac{7}{2} = 1$

15. $-\frac{4}{3} + 0 = -\frac{4}{3}$

16. $9 + \sqrt{5}$ is a real number.

17. $12(5x - 3y) = 60x - 36y$